

REMARKS

This Amendment is filed in response to the Final Office Action mailed on February 14, 2007, and is herewith filed a Request for Continuing Examination. All objections and rejections are respectfully traversed.

Claims 1-37 are currently pending.

Claims 32-37 are added.

Request for Interview

The Applicant respectfully requests a telephonic interview with the Examiner after the Examiner has had an opportunity to consider this Amendment, but before the issuance of the next Office Action. The Applicant may be reached at 617-951-3067.

Objection to Information Disclosure Statement

Applicant thanks the Examiner for pointing out the deficiency in Applicant's IDS submissions on August 1, 2006. A new IDS has been submitted with a correction to the number of pages for the "Lomet Disclosure." The correct number of pages is 11, which was the number of pages previously filed, therefore a new copy of the cited reference has not been included.

Claim Objections

At paragraph 4 of the Office Action, claims 16 and 28 were objected to. Applicant has amended the claims to overcome the objections.

Claim Rejections -35 USC § 112

At paragraph 5 of the Office Action, claims 1-20 were rejected under 35 U.S.C. §112, second paragraph. Specifically, the Examiner rejected the phrase “receiving a write operation directed to a file.”

Applicant urges that amended claims overcome this rejection and clearly show that the write operation identifies a file for performing the write operation on. Accordingly, claims 1-21 should be allowable over the §112 rejection.

The Examiner rejected claims 21 and 22 because of the term “the data buffer” in lines 5-6 of the claim because it is unclear what it is referring to.

Applicant respectfully urges that the claim is clear because the data buffer is the data buffer. The claims use the full tag to claim the raw data buffer. Accordingly, claims 21 and 22 should be allowable over the §112 rejection.

Claim Rejections – 35 USC § 102

At paragraph 6 of the Office Action, claims 1-5, 11, 15-20, and 22-26 were rejected over 35 U.S.C. §102 as being anticipated by Hitz et al., US Patent No. 5,819,292, hereinafter Hitz.

The present invention, as set out in representative claim 1, comprises in part:

1. A method for detecting leaked buffer writes between a first consistency point and a second consistency point, the method comprising:

receiving a write operation, wherein the write operation identifies a file for the write operation to be performed on;

determining that a volume storing the file has buffer leakage detection activated;

creating a data buffer associated with the write operation; and

in response to determining the volume has buffer leakage detection activated, writing a buffer check control structure to a raw data buffer associated with the data buffer.

By way of background, Hitz discloses at col. 7, lines 5-41:

FIG. 10 is a diagram illustrating a file referenced by a WAFL inode 1010. The file comprises indirect WAFL buffers 1020-1024 and direct WAFL buffers 1030-1034. The WAFL in-core inode 1010 comprises standard inode information 1010A (including a count of dirty buffers), a WAFL buffer data structure 1010B, 16 buffer pointers 1010C and a standard on-disk inode 1010D. The incore WAFL inode 1010 has a size of approximately 300 bytes. The on-disk inode is 128 bytes in size. The WAFL buffer data structure 1010B comprises two pointers where the first one references the 16 buffer pointers 1010C and the second references the on-disk block numbers 1010D.

Each inode 1010 has a count of dirty buffers that it references. An inode 1010 can be put in the list of dirty inodes and/or the list of inodes that have dirty buffers. When all dirty buffers referenced by an inode are either scheduled to be written to disk or are written to disk, the count of dirty buffers of inode 1010 is set to zero. The inode 1010 is then requested according to its flag (i.e., no dirty buffers). This inode 1010 is cleared before the next inode is processed. Further the flag of the inode indicating that it is in a consistency point is cleared. The inode 1010 itself is written to disk in a consistency point.

Applicant respectfully urges that Hitz does not disclose Applicant's claimed novel

determining that a volume storing the file has buffer leakage detection activated, creating a data buffer associated with the write operation, and in response to determining the volume has buffer leakage detection activated, writing a buffer check control structure to a raw data buffer associated with the data buffer. In further detail, in Appli-

cant's claimed invention when a write operation directed to a file is received, the volume storing the file is checked to determine if a flag or byte for buffer leakage detection is activated. If the flag or byte is activated, then a buffer check control structure is written to the raw data buffer. The buffer check control structure includes one or more unique values and a value identifying the current consistency point.

In contrast, there is no disclosure in Hitz of ***determining that a volume storing the file has buffer leakage detection activated***, as claimed by Applicant.

Accordingly, Applicant respectfully urges that Hitz is legally insufficient to anticipate the present claims under 35 U.S.C. §102 because of the absence of the Applicant's claimed novel ***determining that a volume storing the file has buffer leakage detection activated, creating a data buffer associated with the write operation, and in response to determining the volume has buffer leakage detection activated, writing a buffer check control structure to a raw data buffer associated with the data buffer.***

Claim Rejections – 35 USC §103

At paragraph 7 of the Office Action, claims 6-10, 12-14, and 27-31 were rejected under 35 U.S.C. as being unpatentable over Hitz, in view of Ganesh et al., US Patent No. 6,192,377, hereinafter Ganesh.

Applicant respectfully notes that claims 6-10, 12-14, and 27-31 are dependent claims that depend from independent claims believed to be in condition for allowance. Accordingly, claims 6-10, 12-14, and 27-31 are believed to be in condition for allowance.

At paragraph 8 of the Office Action, claim 21 was rejected under 35 U.S.C. §103 as being unpatentable over Hitz.

Claim 21 is a computer readable media claim that incorporates the steps of claim 1, and should be allowable for the same reasons as claim 1.

All independent claims are believed to be in condition for allowance.

All dependent claims are believed to be dependent from allowable independent claims.

Applicant respectfully solicits favorable action.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

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